

AMENDMENTS TO THE CLAIMS

Claim 1. **(Currently Amended)**: A method for treating reducing the occurrence of hypercalcemia or osteosarcoma in a patient that has osteoporosis and has received administration of or is being administered, cyclase activating parathyroid hormone (CAP) or analogues thereof comprising also administering a cyclase inhibiting parathyroid hormone peptide (CIP), which CIP comprises a contiguous portion of PTH having an amino acid sequence set forth in SEQ ID NO:5 (PTH₁₋₈₄), having an N-terminal amino acid residue starting at any position spanning from position 2 through position 34 of the PTH₁₋₈₄, and a C-terminal amino acid residue ending at position 84 of the PTH₁₋₈₄, from between PTH₂₋₈₄ (SEQ ID NO:1) and PTH₃₄₋₈₄ (SEQ ID NO:3) or a conservatively substituted variant thereof exhibiting parathyroid hormone (PTH) antagonist activity in a therapeutically effective, but non-toxic amount that reduces the occurrence of hypercalcemia or osteosarcoma in the patient resulting from the administration of CAP.

Claim 2. **(Currently Amended)**: The method of claim 1 wherein the peptide has an N-terminal amino acid residue starting at any position spanning from position 3 through position 28 of the PTH₁₋₈₄, and a C-terminal amino acid residue ending at position 84 of the PTH₁₋₈₄ amino acid sequence from between PTH₃₋₈₄ (SEQ ID NO:2) and PTH₂₈₋₈₄ (SEQ ID NO:8).

Claim 3. **(Original)**: The method of Claim 1 wherein one determines the amount of CAP and CIP present in the patient.

Claim 4. **(Original)**: The method of Claim 3 wherein the CIP administration is performed in a pulsatile manner.

Claim 5. **(Currently Amended)**: A method for treating inducing the cyclase active parathyroid hormone (CAP) rebound effect in a patient that has osteoporosis comprising administering a cyclase inhibiting parathyroid hormone peptide (CIP), which CIP comprises a contiguous portion of PTH having an amino acid sequence set forth in SEQ ID NO:5 (PTH₁₋₈₄), having an N-terminal amino acid residue starting at any position spanning from position 2 through

position 34 of the PTH₁₋₈₄, and a C-terminal amino acid residue ending at position 84 of the PTH₁₋₈₄, from between PTH₂₋₈₄ (SEQ ID NO:1) and PTH₃₄₋₈₄ (SEQ ID NO:3) or a conservatively substituted variant thereof exhibiting parathyroid hormone (PTH) antagonist activity in a therapeutically effective, but non-toxic amount that reduces the occurrence of hypocalcemia or osteosarcoma in the patient resulting from the administration of CAP.

Claim 6. **(Currently Amended):** The method of claim 5 wherein the peptide has an N-terminal amino acid residue starting at any position spanning from position 3 through position 28 of the PTH₁₋₈₄, and a C-terminal amino acid residue ending at position 84 of the PTH₁₋₈₄ amino acid sequence from between PTH₃₋₈₄ (SEQ ID NO:2) and PTH₂₈₋₈₄ (SEQ ID NO:8).

Claim 7. **(Currently Amended):** The method of Claim 5 further comprising determining the wherein one determines the amount of cyclase activating parathyroid hormone (CAP) and CIP present in the patient, wherein the amount of CAP and CIP are determined to monitor and guide the treatment of the patient having osteoporosis.

Claim 8. **(Original):** The method of Claim 7 wherein the CIP administration is performed in a pulsatile manner.

Claim 9. **(New):** The method of claim 1, wherein the patient has osteoporosis.

Claim 10. **(New):** The method of claim 5, wherein the patient has osteoporosis.

Claim 11. **(New):** The method of claim 3, wherein the CIP administration is performed in a continuous manner.

Claim 12. **(New):** The method of claim 7, wherein the CIP administration is performed in a continuous manner.